

AMENDMENTS TO THE DRAWINGS

The attached sheets of drawings include changes to Figs. 3 and 4. Replacement sheets incorporating the changes are attached hereto.

Attachment: Replacement Sheets
Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

Claims 1-23 stand in the present application, claims 7, 8, 13 and 22 having been amended. Reconsideration and favorable action is respectfully requested in view of the above amendments and the following remarks.

In the Office Action, the Examiner has objected to the title as not being descriptive. As noted above, Applicants have amended the title in order to correct the deficiency identified by the Examiner. Accordingly, the Examiner's objection to the title is now believed to have been overcome.

The Examiner has also objected to the drawings because black boxes 301-309 and 400-421 should be labeled with appropriate functions. As noted above, Applicants have requested to permission to revise Figures 3 and 4 in order to correct the deficiencies pointed out by the Examiner. Accordingly, sheets showing the changes and replacement sheets showing the changes having been made are attached hereto.

The Examiner has also rejected claims 8 and 22 under 35 U.S.C. § 112, second paragraph, for technical deficiencies. As noted above, Applicants have amended claims 7, 8 and 22 in order to correct the deficiencies pointed out by the Examiner and accordingly in view of these claim amendments, the Examiner's § 112, second paragraph, rejection of these claims is believed to have been overcome.

The Examiner has also rejected claims 1-3, 7, 10, 11, 15, 16, 19 and 20-23 under 35 U.S.C. § 102(b) as being anticipated by Toth, has rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Toth in view of Ahlstrom et al., has rejected claims 5, 6, 8, 9 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Toth in view of Georgalas ("A framework that uses repositories for information and systems and

knowledge integration") and has rejected claims 13, 14 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Toth in view of Georgalas (U.S. Patent No. 7,019,740). Applicants respectfully traverse the Examiner's §§ 102 and 103 rejections of the claims.

Applicants' invention relates to a method and system for providing a user interface that allows flexible management of data in a distributed environment of heterogeneous data storage systems. The flexibility is achieved via the use of dynamically-loaded software modules, known as data handlers, under the control of policies. Rules that govern which data handlers are used under which circumstances are stored in a rule store. When a request detailing one or ore user requirements is received the system searches in the rule store for a rule associating the user requirement with a handler program and then said handler program is run to interact with the storage system. Applicants' invention has the advantage that it provides a customizable data storage system. New data storage systems can be added while others can be removed according to requirements and availability simply by loading a relevant rule and/or handler program in the rule store or by adding or configuring new rules and/or handlers into the store.

Toth discloses computer system 102 having an information retrieval user interface. A user can enter search criteria by selecting from a list of available attributes and entering a corresponding value for the selected attribute. The user interface module is given access to a plurality of records, which are associated with a plurality of attributes and each attribute has a corresponding value. The records are stored in a database 118 on the computer 102 via a database management system 116. the user

interface module interfaces with the database management system to receive user queries, to retrieve records and to display results to such queries on a display.

The Examiner alleges that database 118 stores rules where each rule includes information relating to a handler program. It is however clearly stated in Toth that the database stores records and, hence, does not store rules.

A search in a system according to Toth retrieves records from the database 118 and these records are displayed on a display. Even assuming arguendo, as the Examiner does, that the stored records are rules, these rules would only be displayed on a display. There is simply no disclosure in Toth of a rule store let alone searching a rule store for a rule associating one or more user requirements of a received request with a handler program, as required by each of the present claims.

Toth relates to an information retrieval interface for searching electronic collections of records or objects while Applicants' invention relates to a method and system for operating a computer system to provide a user interface to a data storage system. Toth does not have a rule store storing rules where each rule includes information relating to a handler program.

The problems the two inventions solve are completely different. Toth aims to simplify a search interface while Applicants' invention aims to achieve flexible management of data in a distributed environment of heterogeneous data storage systems. Hence, a skilled person would not have consulted Toth in order to solve the problem Applicants' invention solves; especially since there is no information in Toth that would be of any help. Thus, there is absolutely no information or hints in Toth that would lead a skilled person to Applicants' invention. Applicants' invention relates to a

method for operating a computer system to provide a user interface to a data storage system comprising the steps of searching in a rule store for a rule associating one or more user requirements of a received request with a handler program and then running said handler program to interact with the data storage system. Such a method and system is not taught or suggested by Toth. Hence, independent claims 1, 19, 21 and 23 and their respective dependent claims are believed to patentably define over Toth.

The Examiner further alleges that the dependent claims lack novelty or inventive step in view of Toth alone or Toth in combination with either Ahlstrom (U.S. Patent 6,327,618) or Georgalas (U.S. Patent 7,019,740) and a framework that uses repositories for information systems and knowledge registration. Ahlstrom concerns a method and apparatus for recognizing and processing conflicts in policies. The error processing in Ahlstrom, which the Examiner considers to be the equivalent of running a default handler program, involves reporting the error in policy definition by for example displaying an error message to a user or writing a description of the error in a log file. Nowhere is it, however, stated that this error processing involves interacting with a data storage system.

The motivation the Examiner states for combining Toth and Ahlstrom; i.e., to interrogate devices to obtain statistics about the network to which they are attached does not make any sense since the system in Toth does not involve a network. For the above reasons, the invention according to claim 4 is believed to further patentably define over Toth in view of Ahlstrom.

Regarding Georgalas “A framework that uses repositories for information systems and knowledge integration,” Applicants have not been able to find the wording

the Examiner refers to in this document in relation to claims 5, 6, 8, 9 and 12. It is therefore difficult to understand the Examiner's rejection. In any case, the dependent claims are novel and inventive by virtue of their dependency on the independent claims 1, 19 and 21.

Claim 13 has been amended to require that the system comprises a different handler for each database. The support for this amendment can be found in the present specification at page 4, lines 12-32; page 24, lines 5-10.

Therefore, in view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all of claims 1-23, standing in the application, be allowed and that the case be passed to issue. If there are any other issues remaining which the Examiner believes could be resolved through either a supplemental response or an Examiner's amendment, the Examiner is respectfully requested to contact the undersigned at the local telephone exchange indicated below.

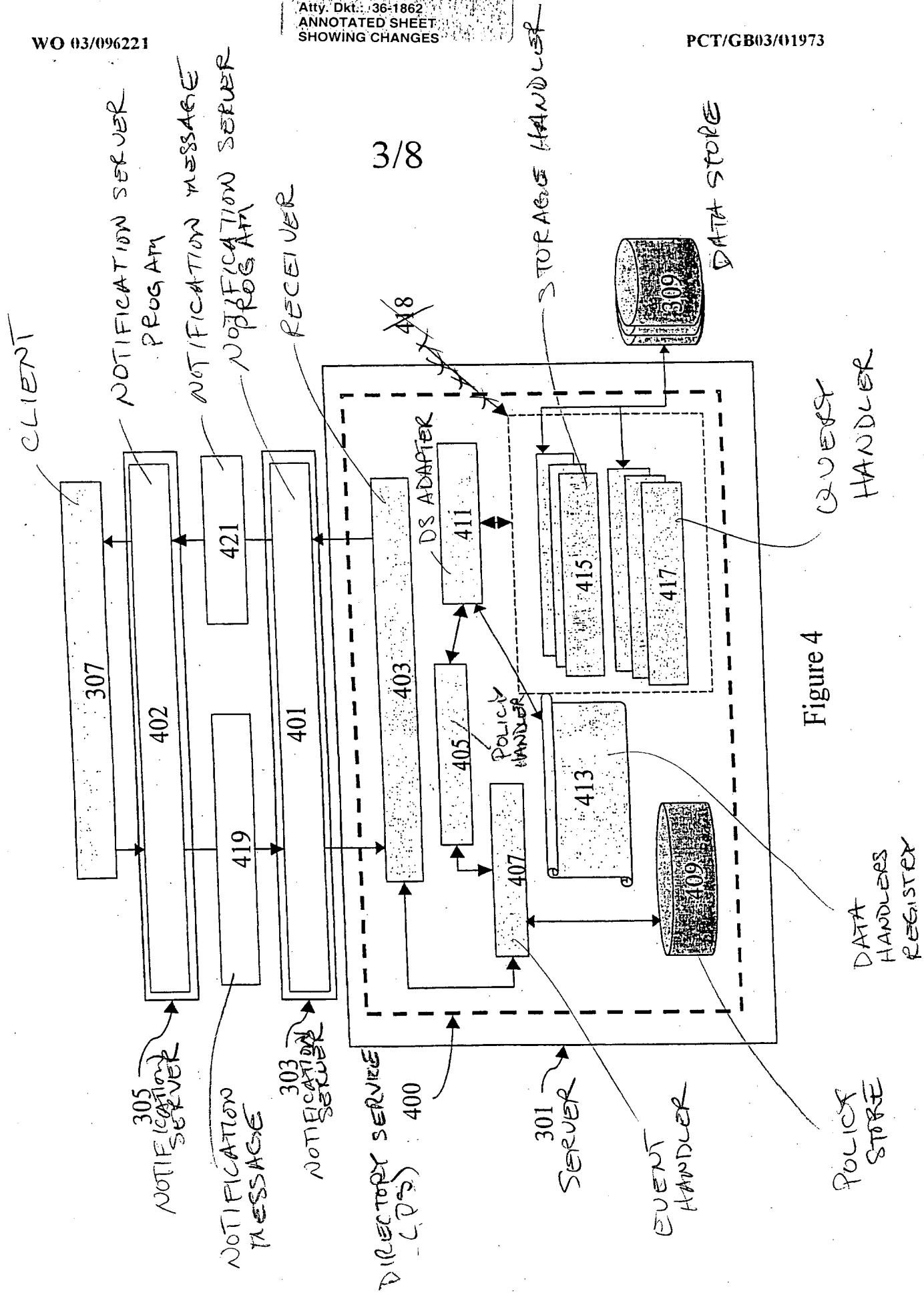
Respectfully submitted,

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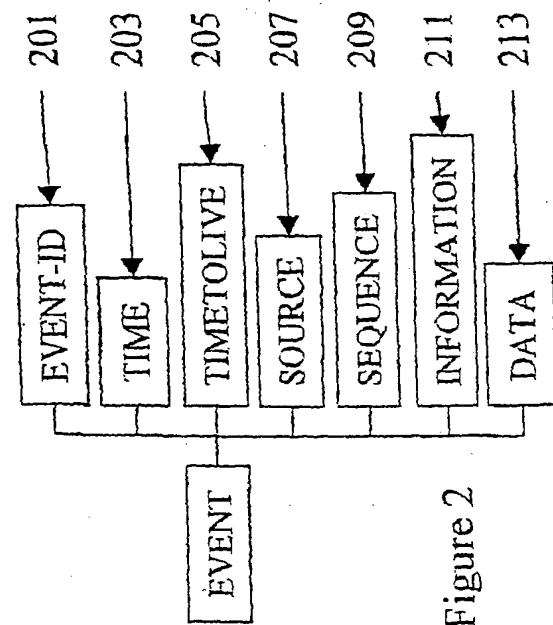
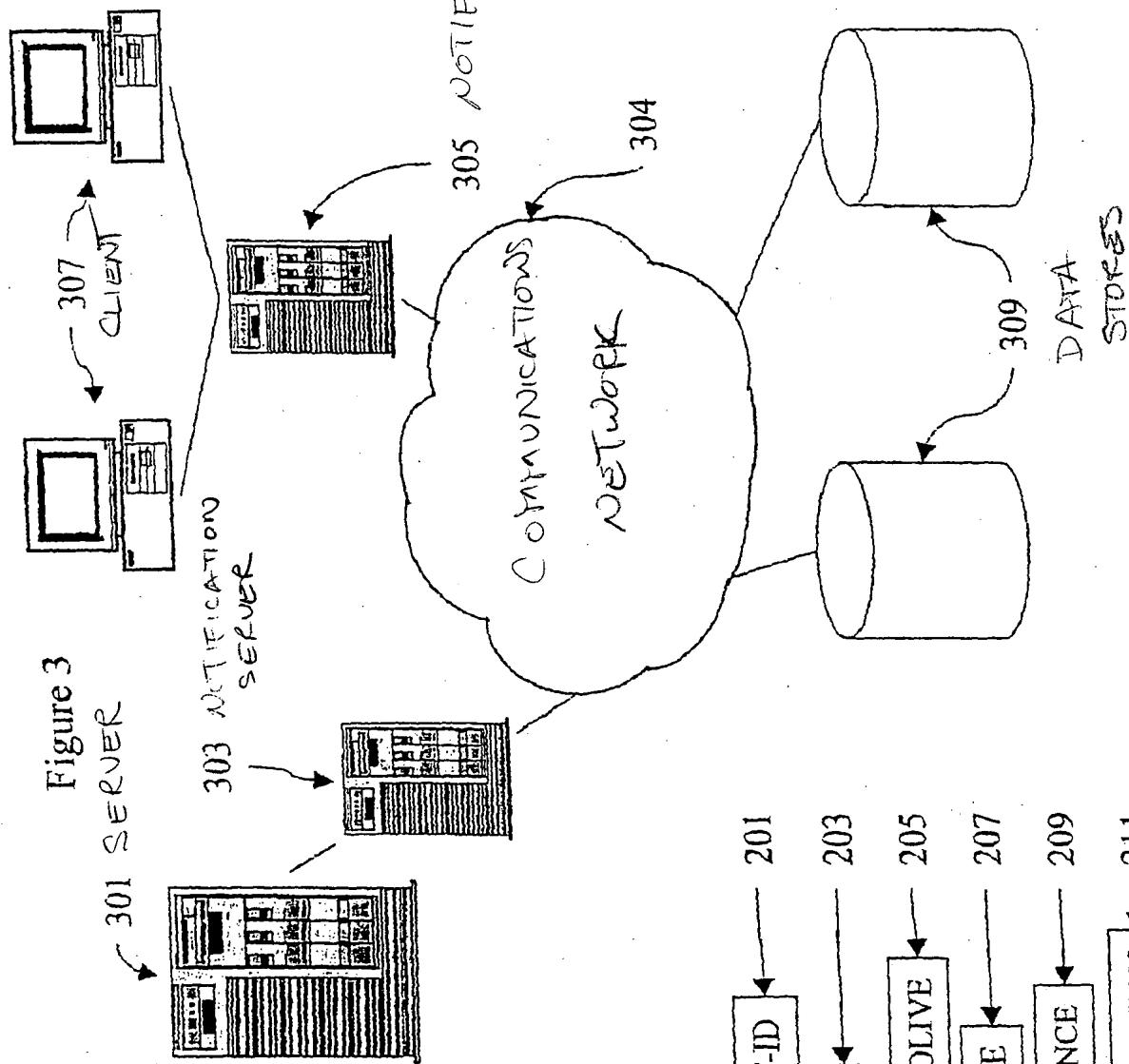


Figure 2